## **ABSTRACT**

## A DOWNLINK ACTIVITY AND DOUBLE TALK PROBABILITY DETECTOR AND METHOD FOR AN ECHO CANCELER CIRCUIT

[0056] A downlink activity and double talk probability detector and method for an echo canceler circuit (10) improves the stability of an echo canceler adaptive filter (300) and improves the attenuation of post-echo canceler uplink data (388). The echo canceler circuit (10) includes a downlink activity and double talk probability data generator (30) and an echo canceler stage (20). The downlink activity and double talk probability data generator (30) receives pre-echo canceler uplink data (40) and downlink data (50) and in response produces double talk probability data (60) and downlink activity data (70). The echo canceler stage (20) receives the downlink data (50), the pre-echo canceler uplink data (40), the double talk probability data (60) and the downlink activity data (70), and in response produces uplink data (80).